BRUHAT BANGALORE MAHANAGARA PALIKE

Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Modified Estimate

Sl No	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate	Amount
				m	m	m		in Rs	in Rs
1	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1)								
	For RCC Drain	Cum							
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00	1.10	1.00	33.00		
	CH:30.00 to 60.00		1	30.00	1.10	1.00	33.00		
	CH: 60.00 to 90.00		1	30.00	1.10	1.00	33.00		
	CH: 90.00 to 120.00		1	30.00	1.10	1.00	33.00		
	CH: 120.00 to 146.00		1	26.00	1.10	1.00	28.60		
	Deduct Culvert		-1	7.00	1.10	1.00	-7.70		
	Harohalli KEB Layout RHS								
	CH:0.00 to 30.00		1	30.00	1.10	1.00	33.00		
	CH:30.00 to 60.00		1	30.00	1.10	1.00	33.00		
	CH: 60.00 to 90.00		1	30.00	1.10	1.00	33.00		
	CH: 90.00 to 120.00		1	30.00	1.10	1.00	33.00		
	CH: 120.00 to 146.00		1	26.00	1.10	1.00	28.60		
	End L Shape								
	CH:0.00 to 26.50		1	26.50	1.10	1.00	29.15		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00	1.10	1.00	33.00		
	CH:30.00 to 60.00		1	30.00	1.10	1.00	33.00		
	CH: 60.00 to 79.80		1	18.90	1.10	1.00	20.79		
	L shape								
	CH:0.00 to 23.40		1	23.40	1.10	1.00	25.74		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00	1.10	1.00	33.00		
	CH:30.00 to 60.00		1	30.00	1.10	1.00	33.00		
	CH: 60.00 to 79.80		1	18.90	1.10	1.00	20.79		
	L shape								
	CH:0.00 to 17.60		1	17.60	1.10	1.00	19.36		
	Culverts								
	KEB Layout		1	7.00	1.20	1.10	9.24		
	at End		1	7.30	1.20	1.10	9.64		
	Approved Rate	217.43							
							Quantity	580.21	217.43	126155.00
2	KSRB M2100-10 : Providing and laying in position plain cement concrete of **Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum in foundation, machine mixed, Placed in foundation and compacted by viberation including curing for 14 days , including cost of all materials, labour, HOM curing, foam works, scaffolding and centring complete as per specifications. Specification. P No. K222, I No 27.18								
	For RCC Drain	Cum							
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00	1.00	0.15	4.50		
	CH:30.00 to 60.00		1	30.00	1.00	0.15	4.50		

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	CH: 60.00 to 90.00			1	30.00	1.00	0.15	4.50		
	CH: 90.00 to 120.00			1	30.00	1.00	0.15	4.50		
	CH: 120.00 to 146.00			1	26.00	1.00	0.15	3.90		
	Deduct Culvert			-1	7.00	1.00	0.15	-1.05		
	Harohalli KEB Layout RHS									
	CH:0.00 to 30.00			1	30.00	1.00	0.15	4.50		
	CH:30.00 to 60.00			1	30.00	1.00	0.15	4.50		
	CH: 60.00 to 90.00			1	30.00	1.00	0.15	4.50		
	CH: 90.00 to 120.00			1	30.00	1.00	0.15	4.50		
	CH: 120.00 to 146.00			1	26.00	1.00	0.15	3.90		
	End L Shape									
	CH:0.00 to 26.50			1	26.50	1.00	0.15	3.98		
	Vaishnavi Layout LHS									
	CH:0.00 to 30.00			1	30.00	1.00	0.15	4.50		
	CH:30.00 to 60.00			1	30.00	1.00	0.15	4.50		
	CH: 60.00 to 79.80			1	18.90	1.00	0.15	2.84		
	L shape									
	CH:0.00 to 23.40			1	23.40	1.00	0.15	3.51		
	Vaishnavi Layout RHS									
	CH:0.00 to 30.00			1	30.00	1.00	0.15	4.50		
	CH:30.00 to 60.00			1	30.00	1.00	0.15	4.50		
	CH: 60.00 to 79.80			1	18.90	1.00	0.15	2.84		
	L shape									
	CH:0.00 to 17.60			1	17.60	1.00	0.15	2.64		
	Culverts									
	KEB Layout			1	7.00	1.00	0.15	1.05		
	at End			1	7.30	1.00	0.15	1.10		
	For CC Road	Cum								
	Harohalli KEB Layout Road	Width								
	CH:0.00 to 13.90	(7.00+7.00)/2		1	13.90	7.00	0.15	14.60		
	CH:13.90 to 43.90	(5.20+5.65)/2		1	30.00	5.43	0.15	24.44		
	CH: 43.90 to 73.90	(5.65+5.60)/2		1	30.00	5.63	0.15	25.34		
	CH: 73.90 to 103.90	(5.60+5.50)/2		1	30.00	5.55	0.15	24.98		
	CH: 103.90 to 133.90	(5.50+5.50)/2		1	30.00	5.50	0.15	24.75		
	CH: 133.90 to 146.00	(5.50+5.50)/2		1	21.10	5.50	0.15	17.41		
	Vaishnavi Layout									
	CH:0.00 to 30.00	(6.70+6.80)/2		1	30.00	6.75	0.15	30.38		
	CH:30.00 to 60.00	(6.80+6.80)/2		1	30.00	6.80	0.15	30.60		
	CH: 60.00 to 79.80	(6.80+6.70)/2		1	29.80	6.75	0.15	30.17		
	Deduct For House			-1	4.00	1.50	0.15	-0.90		
	Cross Road to Sai Vihar Layout RHS									
	CH:0.00 to 30.00	(3.50+3.50)/2		1	30.00	3.50	0.15	15.75		
	CH:30.00 to 45.00	(3.50 +3.20)/2		1	15.00	3.35	0.15	7.54		
	Cross LHS Side Sai Vihar Layout RHS									
	CH:0.00 to 30.00	(5.60+6.40)/2		1	30.00	6.00	0.15	27.00		

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	CH:30.00 to 60.00	(6.40+5.80)/2	1	30.00	6.10	0.15	27.45		
	CH: 60.00 to 87.50	(5.80+5.00)/2	1	27.50	5.40	0.15	22.28		
	CH: 87.50 to 93.40	(5.00+3.70)/2	1	5.90	4.35	0.15	3.85		
	CH:93.40 to 112.00	(3.70+2.90)/2	1	18.60	3.30	0.15	9.21		
	Light Poles		-4	0.30	0.10	0.15	-0.02		
	Trees		-7	0.30	0.30	0.15	-0.09		
	Planter Box		-3	5.00	2.00	0.15	-4.50		
	Approved Rate	5476.14					408.89	5476.14	2239149.00
3	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19)								
	For RCC Drain	Cum							
	For RCC Drain, Raft	Cum							
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00	0.90	0.15	4.05		
	CH:30.00 to 60.00		1	30.00	0.90	0.15	4.05		
	CH: 60.00 to 90.00		1	30.00	0.90	0.15	4.05		
	CH: 90.00 to 120.00		1	30.00	0.90	0.15	4.05		
	CH: 120.00 to 146.00		1	26.00	0.90	0.15	3.51		
	Deduct Culvert		-1	7.00	0.90	0.15	-0.95		
	Harohalli KEB Layout RHS								
	CH:0.00 to 30.00		1	30.00	0.90	0.15	4.05		
	CH:30.00 to 60.00		1	30.00	0.90	0.15	4.05		
	CH: 60.00 to 90.00		1	30.00	0.90	0.15	4.05		
	CH: 90.00 to 120.00		1	30.00	0.90	0.15	4.05		
	CH: 120.00 to 146.00		1	26.00	0.90	0.15	3.51		
	End L Shape								
	CH:0.00 to 26.50		1	26.50	0.90	0.15	3.58		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00	0.90	0.15	4.05		
	CH:30.00 to 60.00		1	30.00	0.90	0.15	4.05		
	CH: 60.00 to 79.80		1	18.90	0.90	0.15	2.55		
	L shape								
	CH:0.00 to 23.40		1	23.40	0.90	0.15	3.16		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00	0.90	0.15	4.05		
	CH:30.00 to 60.00		1	30.00	0.90	0.15	4.05		
	CH: 60.00 to 79.80		1	18.90	0.90	0.15	2.55		
	L shape								
	CH:0.00 to 17.60		1	17.60	0.90	0.15	2.38		
	Culverts								
	KEB Layout		1	7.00	0.90	0.20	1.26		
	at End		1	7.30	0.90	0.20	1.31		
	For RCC Drain, Side Walls	Cum							
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		2	30.00	0.15	0.60	5.40		
	CH:30.00 to 60.00		2	30.00	0.15	0.60	5.40		
	CH: 60.00 to 90.00		2	30.00	0.15	0.60	5.40		
	CH: 90.00 to 120.00		2	30.00	0.15	0.60	5.40		
	CH: 120.00 to 146.00		2	26.00	0.15	0.60	4.68		
	Deduct Culvert		-2	7.00	0.15	0.60	-1.26		

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	Harohalli KEB Layout RHS									
	CH:0.00 to 30.00			2	30.00	0.15	0.60	5.40		
	CH:30.00 to 60.00			2	30.00	0.15	0.60	5.40		
	CH: 60.00 to 90.00			2	30.00	0.15	0.60	5.40		
	CH: 90.00 to 120.00			2	30.00	0.15	0.60	5.40		
	CH: 120.00 to 146.00			2	26.00	0.15	0.60	4.68		
	End L Shape									
	CH:0.00 to 26.50			2	26.50	0.15	0.60	4.77		
	Vaishnavi Layout LHS									
	CH:0.00 to 30.00			2	30.00	0.15	0.60	5.40		
	CH:30.00 to 60.00			2	30.00	0.15	0.60	5.40		
	CH: 60.00 to 79.80			2	18.90	0.15	0.60	3.40		
	L shape									
	CH:0.00 to 23.40			2	23.40	0.15	0.60	4.21		
	Vaishnavi Layout RHS									
	CH:0.00 to 30.00			2	30.00	0.15	0.60	5.40		
	CH:30.00 to 60.00			2	30.00	0.15	0.60	5.40		
	CH: 60.00 to 79.80			2	18.90	0.15	0.60	3.40		
	L shape									
	CH:0.00 to 17.60			2	17.60	0.15	0.60	3.17		
	Culverts									
	KEB Layout			2	7.00	0.20	0.60	1.68		
	at End			2	7.30	0.20	0.60	1.75		
	Approved Rate	7140.93								
								166.75	7140.93	1190754.00
4	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)									
		MT								
	For RCC Drain									
							0.00	9.24		
	RCC Culverts									
							0.00	0.338		
								9.57	74732.44	714966.00
	Approved Rate	74732.44								
5	Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)									
	For drain cover slab	**Sqm**								
	For RCC Drain									
	Harohalli KEB Layout LHS									
	CH:0.00 to 30.00			1	30.00	0.90		27.00		
	CH:30.00 to 60.00			1	30.00	0.90		27.00		
	CH: 60.00 to 90.00			1	30.00	0.90		27.00		
	CH: 90.00 to 120.00			1	30.00	0.90		27.00		
	CH: 120.00 to 146.00			1	26.00	0.90		23.40		
	Deduct Culvert			-1	7.00	0.90		-6.30		
	Harohalli KEB Layout RHS									
	CH:0.00 to 30.00			1	30.00	0.90		27.00		
	CH:30.00 to 60.00			1	30.00	0.90		27.00		
	CH: 60.00 to 90.00			1	30.00	0.90		27.00		
	CH: 90.00 to 120.00			1	30.00	0.90		27.00		

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	CH: 120.00 to 146.00		1	26.00	0.90		23.40		
	End L Shape								
	CH:0.00 to 26.50		1	26.50	0.90		23.85		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00	0.90		27.00		
	CH:30.00 to 60.00		1	30.00	0.90		27.00		
	CH: 60.00 to 79.80		1	18.90	0.90		17.01		
	Deduct For House		-1	9.15	0.90				
	L shape								
	CH:0.00 to 23.40		1	23.40	0.90		21.06		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00	0.90		27.00		
	CH:30.00 to 60.00		1	30.00	0.90		27.00		
	CH: 60.00 to 79.80		1	18.90	0.90		17.01		
	L shape								
	CH:0.00 to 17.60		1	17.60	0.90		15.84		
	Approved Rate	2360.38					459.27	2360.38	1084052.00
6	Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	For Culvert Slabs	Sqm							
	Culverts								
	KEB Layout		1	7.00	1.20		8.40		
	at End		1	7.30	1.20		8.76		
	Approved Rate	5472.20					17.16	5472.20	93903.00
7	KSRB 4-16 Providing and laying in position plain cement concrete mix 1:2:4 with OPC 240kgs with 20mm down size graded granite aggrigates @.878 cum and fine aggregates @.53 cum machine mixed concrete lain in layers not exceeding 15cms thick well compacted in foundation plinth and cills including cost of all materials and labour, HOM curing complete as per specifications . Specification no KB (P No 13, I No 4.6)								
	KERB PCC	Cum							
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00	0.20	0.10	0.60		
	CH:30.00 to 60.00		1	30.00	0.20	0.10	0.60		
	CH: 60.00 to 90.00		1	30.00	0.20	0.10	0.60		
	CH: 90.00 to 120.00		1	30.00	0.20	0.10	0.60		
	CH: 120.00 to 146.00		1	26.00	0.20	0.10	0.52		
	Deduct Culvert		-1	7.00	0.20	0.10	-0.14		
	Harohalli KEB Layout RHS								
	CH:0.00 to 30.00		1	30.00	0.20	0.10	0.60		
	CH:30.00 to 60.00		1	30.00	0.20	0.10	0.60		
	CH: 60.00 to 90.00		1	30.00	0.20	0.10	0.60		
	CH: 90.00 to 120.00		1	30.00	0.20	0.10	0.60		
	CH: 120.00 to 146.00		1	26.00	0.20	0.10	0.52		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00	0.20	0.10	0.60		
	CH:30.00 to 60.00		1	30.00	0.20	0.10	0.60		
	CH: 60.00 to 79.80		1	18.90	0.20	0.10	0.38		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00	0.20	0.10	0.60		
	CH:30.00 to 60.00		1	30.00	0.20	0.10	0.60		
	CH: 60.00 to 79.80		1	18.90	0.20	0.10	0.38		
	Deduct For House Area		-1	9.18	0.20	0.10	-0.18		
	Approved Rate	5804.81					8.67	5804.81	50342.00

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8	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete. Page No. 27/ Item No. 5.30/ PWD SR 2018-19								
	Nagenahalli	Nos							
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00			30.00		
	CH:30.00 to 60.00		1	30.00			30.00		
	CH: 60.00 to 90.00		1	30.00			30.00		
	CH: 90.00 to 120.00		1	30.00			30.00		
	CH: 120.00 to 146.00		1	26.00			26.00		
	Deduct Culvert		-1	7.00			-7.00		
	Harohalli KEB Layout RHS								
	CH:0.00 to 30.00		1	30.00			30.00		
	CH:30.00 to 60.00		1	30.00			30.00		
	CH: 60.00 to 90.00		1	30.00			30.00		
	CH: 90.00 to 120.00		1	30.00			30.00		
	CH: 120.00 to 146.00		1	26.00			26.00		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00			30.00		
	CH:30.00 to 60.00		1	30.00			30.00		
	CH: 60.00 to 79.80		1	30.00			30.00		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00			30.00		
	CH:30.00 to 60.00		1	30.00			30.00		
	CH: 60.00 to 79.80		1	30.00			30.00		
	Deduct For House Area		-1	9.18			-9.18		
							455.82		
	Approved Rate	436.81					**455.82**		
							1013.00	436.81	442489.00
9	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
		Sqm							
	Nagenahalli								
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00		0.35	10.50		
	CH:30.00 to 60.00		1	30.00		0.35	10.50		
	CH: 60.00 to 90.00		1	30.00		0.35	10.50		
	CH: 90.00 to 120.00		1	30.00		0.35	10.50		
	CH: 120.00 to 146.00		1	26.00		0.35	9.10		
	Deduct Culvert		-1	7.00		0.35	-2.45		
	Harohalli KEB Layout RHS								
	CH:0.00 to 30.00		1	30.00		0.35	10.50		
	CH:30.00 to 60.00		1	30.00		0.35	10.50		
	CH: 60.00 to 90.00		1	30.00		0.35	10.50		
	CH: 90.00 to 120.00		1	30.00		0.35	10.50		
	CH: 120.00 to 146.00		1	26.00		0.35	9.10		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00		0.35	10.50		
	CH:30.00 to 60.00		1	30.00		0.35	10.50		
	CH: 60.00 to 79.80		1	30.00		0.35	10.50		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00		0.35	10.50		
	CH:30.00 to 60.00		1	30.00		0.35	10.50		

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	CH: 60.00 to 79.80			1	30.00		0.35	10.50		
	Deduct For House Area			-1	9.18		0.35	-3.21		
	Approved Rate	85.65						159.54	85.65	13665.00
10	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)									
	For RCC Road	Cum								
	For CC Road	Cum								
	Harohalli KEB Layout Road	Width								
	CH:0.00 to 13.90	(7.00+7.00)/2		1	13.90	7.00	0.30	29.19		
	CH:13.90 to 43.90	(5.20+5.65)/2		1	30.00	5.43	0.30	48.87		
	CH: 43.90 to 73.90	(5.65+5.60)/2		1	30.00	5.63	0.30	50.67		
	CH: 73.90 to 103.90	(5.60+5.50)/2		1	30.00	5.55	0.30	49.95		
	CH: 103.90 to 133.90	(5.50+5.50)/2		1	30.00	5.50	0.30	49.50		
	CH: 133.90 to 146.00	(5.50+5.50)/2		1	21.10	5.50	0.30	34.82		
	Vaishnavi Layout									
	CH:0.00 to 30.00	(6.70+6.80)/2		1	30.00	6.75	0.30	60.75		
	CH:30.00 to 60.00	(6.80+6.80)/2		1	30.00	6.80	0.30	61.20		
	CH: 60.00 to 79.80	(6.80+6.70)/2		1	29.80	6.75	0.30	60.35		
	Deduct For House			-1	4.00	1.50	0.30	-1.80		
	Cross Road to Sai Vihar Layout RHS									
	CH:0.00 to 30.00	(3.50+3.50)/2		1	30.00	3.50	0.30	31.50		
	CH:30.00 to 45.00	(3.50 +3.20)/2		1	15.00	3.35	0.30	15.08		
	Cross LHS Side									
	CH:0.00 to 30.00	(5.60+6.40)/2		1	30.00	6.00	0.25	45.00		
	CH:30.00 to 60.00	(6.40+5.80)/2		1	30.00	6.10	0.25	45.75		
	CH: 60.00 to 87.50	(5.80+5.00)/2		1	27.50	5.40	0.25	37.13		
	CH: 87.50 to 93.40	(5.00+3.70)/2		1	5.90	4.35	0.25	6.42		
	CH:93.40 to 112.00	(3.70+2.90)/2		1	18.60	3.30	0.25	15.35		
	Light Poles			-4	0.30	0.10	0.25	-0.03		
	Trees			-7	0.30	0.30	0.25	-0.16		
	Planter Box			-3	5.00	2.00	0.25	-7.50		
	Approved Rate	64.58								
						Qty		632.01	64.58	40816.00
11	KSRRB M300-52.2. Scarifying the Existing Bituminous surface to a depth of 50mm by Mechanical Means. Scarifying the existing bituminous road surface to a depth of 50mm and disposal of scarified material and complete as per specifications.MORTH Specification No. 305.4.3(P-146 , I.no 19.59).									

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			Sqm							
	Approved Rate		3.75							
								0.00	3.75	0.00
12	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/ basalt material,mixing by mix in place method with rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.9(I No. -20.5, P No 153									
	For CC Road		Cum							
			Width							
	Harohalli KEB Layout Road		Width							
	CH:0.00 to 13.90		(7.00+7.0 0)/2	1	13.90	7.00		97.30		
	CH:13.90 to 43.90		(5.20+5.6 5)/2	1	30.00	5.43		162.90		
	CH: 43.90 to 73.90		(5.63+5.6 0)/2	1	30.00	5.63		168.90		
	CH: 73.90 to 103.90		(5.60+5.5 0)/2	1	30.00	5.55		166.50		
	CH: 103.90 to 133.90		(5.50+5.5 0)/2	1	30.00	5.50		165.00		
	CH: 133.90 to 146.00		(5.50+5.5 0)/2	1	21.10	5.50		116.05		
	Vaishnavi Layout									
	CH:0.00 to 30.00		(6.70+6.8 0)/2	1	30.00	6.75		202.50		
	CH:30.00 to 60.00		(6.80+6.8 0)/2	1	30.00	6.80		204.00		
	CH: 60.00 to 79.80		(6.80+6.7 0)/2	1	29.80	6.75		201.15		
	Deduct For House			-1	4.00	1.50		-6.00		
	Cross Road to Sai Vihar Layout RHS									
	CH:0.00 to 30.00		(3.50+3.5 0)/2	1	30.00	3.50		105.00		
	CH:30.00 to 45.00		(3.50 +3.20)/2	1	15.00	3.35		50.25		
	Cross LHS Side									
	CH:0.00 to 30.00		(5.60+6.4 0)/2	1	30.00	6.00		180.00		
	CH:30.00 to 60.00		(6.40+5.8 0)/2	1	30.00	6.10		183.00		
	CH: 60.00 to 87.50		(5.80+5.0 0)/2	1	27.50	5.40		148.50		
	CH: 87.50 to 93.40		(5.00+3.7 0)/2	1	5.90	4.35		25.67		
	CH:93.40 to 112.00		(3.70+2.9 0)/2	1	18.60	3.30		61.38		
	Light Poles			-4	0.30	0.10		-0.12		
	Trees			-7	0.30	0.30		-0.63		
	Planter Box			-3	5.00	2.00		-30.00		
	Approved Rate		6.43							
								2201.35	6.43	14155.00

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13	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material,mixing by mix in place method with rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision 9(I No. -20.5, P No 153								
	For CC Road	Cum							
		Width							
	Harohalli KEB Layout Road	Width							
	CH:0.00 to 13.90	(7.00+7.00)/2	1	13.90	7.00	0.15	14.60		
	CH:13.90 to 43.90	(5.20+5.65)/2	1	30.00	5.43	0.15	24.44		
	CH: 43.90 to 73.90	(5.65+5.60)/2	1	30.00	5.63	0.15	25.34		
	CH: 73.90 to 103.90	(5.60+5.50)/2	1	30.00	5.55	0.15	24.98		
	CH: 103.90 to 133.90	(5.50+5.50)/2	1	30.00	5.50	0.15	24.75		
	CH: 133.90 to 146.00	(5.50+5.50)/2	1	21.10	5.50	0.15	17.41		
	Vaishnavi Layout								
	CH:0.00 to 30.00	(6.70+6.80)/2	1	30.00	6.75	0.15	30.38		
	CH:30.00 to 60.00	(6.80+6.80)/2	1	30.00	6.80	0.15	30.60		
	CH: 60.00 to 79.80	(6.80+6.70)/2	1	29.80	6.75	0.15	30.17		
	Deduct For House		-1	4.00	1.50	0.15	-0.90		
	Cross Road to Sai Vihar Layout RHS								
	CH:0.00 to 30.00	(3.50+3.50)/2	1	30.00	3.50	0.15	15.75		
	CH:30.00 to 45.00	(3.50 +3.20)/2	1	15.00	3.35	0.15	7.54		
	Cross LHS Side								
	CH:0.00 to 30.00	(5.60+6.40)/2	1	30.00	6.00	0.15	27.00		
	CH:30.00 to 60.00	(6.40+5.80)/2	1	30.00	6.10	0.15	27.45		
	CH: 60.00 to 87.50	(5.80+5.00)/2	1	27.50	5.40	0.15	22.28		
	CH: 87.50 to 93.40	(5.00+3.70)/2	1	5.90	4.35	0.15	3.85		
	CH:93.40 to 112.00	(3.70+2.90)/2	1	18.60	3.30	0.15	9.21		
	Light Poles		-4	0.30	0.10	0.15	-0.02		
	Trees		-7	0.30	0.30	0.15	-0.09		
	Planter Box		-3	5.00	2.00	0.15	-4.50		
	Approved Rate	2014.86							
							330.20	2014.86	665311.00

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14	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum, over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008, mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1)								
	For CC Road	Cum							
		Width							
	Harohalli KEB Layout Road	Width							
	CH:0.00 to 13.90	(7.00+7.00)/2	1	13.90	7.00	0.15	14.60		
	CH:13.90 to 43.90	(5.20+5.65)/2	1	30.00	5.43	0.15	24.44		
	CH: 43.90 to 73.90	(5.65+5.60)/2	1	30.00	5.63	0.15	25.34		
	CH: 73.90 to 103.90	(5.60+5.50)/2	1	30.00	5.55	0.15	24.98		
	CH: 103.90 to 133.90	(5.50+5.50)/2	1	30.00	5.50	0.15	24.75		
	CH: 133.90 to 146.00	(5.50+5.50)/2	1	21.10	5.50	0.15	17.41		
	Vaishnavi Layout								
	CH:0.00 to 30.00	(6.70+6.80)/2	1	30.00	6.75	0.15	30.38		
	CH:30.00 to 60.00	(6.80+6.80)/2	1	30.00	6.80	0.15	30.60		
	CH: 60.00 to 79.80	(6.80+6.70)/2	1	29.80	6.75	0.15	30.17		
	Deduct For House		-1	4.00	1.50	0.15	-0.90		
	Cross Road to Sai Vihar Layout RHS								
	CH:0.00 to 30.00	(3.50+3.50)/2	1	30.00	3.50	0.15	15.75		
	CH:30.00 to 45.00	(3.50 +3.20)/2	1	15.00	3.35	0.15	7.54		
	Cross LHS Side								
	CH:0.00 to 30.00	(5.60+6.40)/2	1	30.00	6.00	0.15	27.00		
	CH:30.00 to 60.00	(6.40+5.80)/2	1	30.00	6.10	0.15	27.45		
	CH: 60.00 to 87.50	(5.80+5.00)/2	1	27.50	5.40	0.15	22.28		
	CH: 87.50 to 93.40	(5.00+3.70)/2	1	5.90	4.35	0.15	3.85		
	CH:93.40 to 112.00	(3.70+2.90)/2	1	18.60	3.30	0.15	9.21		
	Light Poles		-4	0.30	0.10	0.15	-0.02		
	Trees		-7	0.30	0.30	0.15	-0.09		
	Planter Box		-3	5.00	2.00	0.15	-4.50		
	Approved Rate	5263.00					330.20	5263.00	1737852.00
								Total Amount	8413609.00

Technical Sanction
Accorded For .....
Head of A/C.....
CER NO :.....

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

Executive Engineer
Project Division
Yelahanka Zone
Bangalore

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14	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1)								
	For CC Road								
		Cum							
	Harohalli KEB Layout Road	Width							
	CH:0.00 to 13.90	(7.00+7.00)/2	1	13.90	7.00	0.15	14.60		
	CH:13.90 to 43.90	(5.20+5.65)/2	1	30.00	5.43	0.15	24.44		
	CH: 43.90 to 73.90	(5.65+5.60)/2	1	30.00	5.63	0.15	25.34		
	CH: 73.90 to 103.90	(5.60+5.50)/2	1	30.00	5.55	0.15	24.98		
	CH: 103.90 to 133.90	(5.50+5.50)/2	1	30.00	5.50	0.15	24.75		
	CH: 133.90 to 146.00	(5.50+5.50)/2	1	21.10	5.50	0.15	17.41		
	Vaishnavi Layout								
	CH:0.00 to 30.00	(6.70+6.80)/2	1	30.00	6.75	0.15	30.38		
	CH:30.00 to 60.00	(6.80+6.80)/2	1	30.00	6.80	0.15	30.60		
	CH: 60.00 to 79.80	(6.80+6.70)/2	1	29.80	6.75	0.15	30.17		
	Deduct For House		-1	4.00	1.50	0.15	-0.90		
	Cross Road to Sai Vihar Layout RHS								
	CH:0.00 to 30.00	(3.50+3.50)/2	1	30.00	3.50	0.15	15.75		
	CH:30.00 to 45.00	(3.50 +3.20)/2	1	15.00	3.35	0.15	7.54		
	Cross LHS Side								
	CH:0.00 to 30.00	(5.60+6.40)/2	1	30.00	6.00	0.15	27.00		
	CH:30.00 to 60.00	(6.40+5.80)/2	1	30.00	6.10	0.15	27.45		
	CH: 60.00 to 87.50	(5.80+5.00)/2	1	27.50	5.40	0.15	22.28		
	CH: 87.50 to 93.40	(5.00+3.70)/2	1	5.90	4.35	0.15	3.85		
	CH:93.40 to 112.00	(3.70+2.90)/2	1	18.60	3.30	0.15	9.21		
	Light Poles		-4	0.30	0.10	0.15	-0.02		
	Trees		-7	0.30	0.30	0.15	-0.09		
	Planter Box		-3	5.00	2.00	0.15	-4.50		
							330.20	5263.00	1737852.00
	Approved Rate	5263.00						Total Amount	8413609.00

Technical Sanction
Accorded for Rs. 8413609.0
Head of A/C P3727
CER NO: 32A Dt. 18.08.22

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

Executive Engineer
Project Division
Yelahanka Zone
Bangalore

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